

REMARKS

This Reply and Amendment is intended to be completely responsive to the Office Action dated November 19, 2003. Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 39-76 stand rejected. On entry of this Reply and Amendment, Claims 39, 54, and 65 will be amended for clarity. Accordingly, Claims 39-76 will be pending in this Application.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

No new matter has been added.

The Applicants note that the Office Action summary dated November 19, 2003 incorrectly indicates that Claims 43-76 are pending in the present application. As shown in the Listing of Claims in the Reply and Amendment dated September 2, 2003, Claims 39-76 are pending in the present application.

Specification and Rejection under 35 U.S.C. § 112

On page 2 of the Office Action, the amendment filed September 2, 2003 was objected to under 35 U.S.C. § 132.

Claims 43-76 were also rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

The Applicants believe that the Examiner intended that the rejection under 35 U.S.C. § 112, first paragraph was to apply to pending Claims 39-76, based on the reasons presented by the Examiner. Again, as shown in the "Listing of Claims" of the September 2, 2003 Reply and Amendment, Claims 39-76 are pending in the present application.

Independent Claims 39, 54, and 65 have been amended for clarity. The Applicants submit that the rejections under 35 U.S.C. § 132 and 35 U.S.C. § 112 have been overcome. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 132 and 35 U.S.C. § 112, first paragraph is therefore respectfully requested.

Claim Rejections – 35 U.S.C. § 103(a)

On page 3 of the Office Action, Claims 35-76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,556,853 (“Cannone”) in view of U.S. Patent No. 5,858,575 (“Chen”).

The Applicants believe that since Claims 35-38 were previously cancelled, this rejection was intended by the Examiner to apply to pending Claims 39-76. Accordingly, the arguments presented below address the rejection of Claims 39-76 under 35 U.S.C. § 103(a).

Claims 39, 54, and 65 are in independent form. Claims 40-53 depend from Claim 39. Claims 55-64 depend from Claim 54. Claims 66-76 depend from Claim 65.

Claim 39 (as amended) relates to a “grid for a battery” and recites, in combination with other elements, “a plurality of wire elements” in which “at least one of the wire elements has a first transverse cross-section taken at a position intermediate the opposed ends of the wire element and a second transverse cross-section taken at one of the opposed ends of the wire element, the second transverse cross-section being generally rectangular and the first transverse cross-section being non-rectangular.”

Claim 54 (as amended) relates to a “grid for a battery” and recites, in combination with other elements, “a plurality of wires having a plurality of surfaces, at least one of the wires having a substantially rectangular cross-section at a first location and a non-rectangular cross-section at a second location.”

Claim 65 (as amended) relates to a “grid for a battery” and recites, in combination with other elements, “a means for supporting an active material” that “includes at least one wire element having a generally rectangular cross-sectional shape at a first location and a non-rectangular cross-sectional shape at a second location.”

The subject matter recited in independent Claims 39, 54, and 65 (as amended) would not have been obvious over Cannone in view of Chen under 35 U.S.C. § 103(a). Cannone shows a “generally circular grid structure” that includes “concentric circular structural members” that are “joined by radial structural members” and that have a “cross-section configuration” that is “essentially hexagonal” (Column 2, lines 44-47; Column 3, lines 21-23). Chen relates to “hot dipped Pb-Ca grids for lead-acid batteries” and shows an “expanded battery grid” comprising “a plurality of grid wires 4” that are “interconnected by a plurality of nodes 6 to form a gridwork for supporting the electrodes active material” (Column 2, lines 56-59).

However, the combination of Cannone and Chen would not result in the subject matter recited in independent Claims 39, 54, and 65, or in corresponding dependent Claims 40-53, 55-64, and 66-76. For example, neither Cannone or Chen, alone or in any proper combination, disclose, teach or suggest a “wire element” that has a “second transverse cross-section” that is “generally rectangular” and a “first transverse cross-section” that is “non-rectantular,” as recited in Claims 39-53. Cannone and Chen, alone or in any proper combination, also do not disclose, teach or suggest a “wire” that has a “substantially rectangular cross-section at a first location and a non-rectangular cross-section at a second location,” as recited in Claims 55-64. Further, Cannone and Chen, alone or in any proper combination, do not disclose, teach or suggest a “wire element” that has a “generally rectangular cross-sectional shape at a first location and a non-rectangular cross-sectional shape at a second location,” as recited in Claims 65-76.

In contrast, for example, Cannone shows in Figure 1 that the cross-section of both the center and ends of the “concentric circular structural members” is “essentially hexagonal” (see, e.g., the point at which member 11 intersects radial member 14, where member 11 has an essentially hexagonal cross-section at the point of contact with radial member 14), and there is no teaching or suggestion in Cannone that the cross-section differs between two different locations in the “concentric circular structural members.” Chen also does not disclose, teach, or suggest the “wire” recited in independent Claim 54 or the “wire element” recited in independent Claims 39 and 65 (and their corresponding dependent claims).

Furthermore, to transform the combination of Cannone and Chen to the “wire element” recited in independent Claims 39 and 65 (and corresponding dependent Claims 40-53 and 66-76) or the “wire” recited in independent Claim 54 (and corresponding dependent Claims 55-64) would require still further modification, and such modification is taught only by the Applicants’ own disclosure.

The subject matter recited in Claims 39-76, considered as a whole, would not have been obvious to a person having ordinary skill in the art in view of the combination of Cannone and Chen. The rejection of Claims 39-76 over Cannone in view of Chen under 35 U.S.C. § 103(a) is improper. Therefore, Claims 39-76 are patentable over Cannone in view of Chen.

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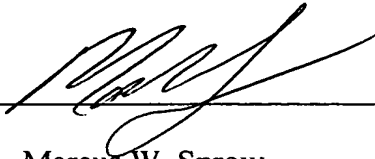
It is submitted that each outstanding objection and rejection to the Application has been overcome, and that the Application is in a condition for allowance. Claims 39-76 will be pending in this Application upon entry of this Reply and Amendment. The Applicants request reconsideration and allowance of all pending Claims 39-76.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 06-1447.

Respectfully submitted,

Date 2/12/04

By 

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